### **Project Proposal**

Proposal Title: Muddy Creek Proposal Number: 1421

DWR Region: Southern Region Lead Agency: BLM County: Kane

Project Manager: Shawn Peterson PM Phone: 4358656113 Regional Priority: Within Focus Area

Project Type: Terrestrial Habitat Proposed Start Date: 8/15/2009

Project Location: The proposed project area is located west of Hwy 89 and north of Hwy 9 near Mt. Carmel Jct., in the Muddy Creek/Orderville

watershed

Project Description: 1000 acres of bullhog and aerial seed in spring and fall deer range and elk winter range near Mt. Carmel.

Description of Problem/Need: The Muddy Creek project area is dominated by closed canopy pinyon and juniper trees and has little to no remnant sagebrush, forb, or grass component. Soils in the Muddy Creek/Orderville watershed are presently being actively eroded. Soil erosion is occurring due to the lack of vegetation causing high sediment loading in the Virgin River. High tree density increases the risk of catastrophic wildfire, thus threatening the community and outlying residential properties of Mt. Carmel. A catastrophic wildfire could also increase the risk or invasive species and erosion.

Objectives: Increase perennial grass and forb frequency to at least 40%

Decrease hazardous fuels by removing 95% of standing pinyon and juniper.

Reduce pinyon and juniper density.

Reduce sedimentation and salinity through erosion into the Virgin River.

Relevance to Strategic Plans: This project is located in Shrub steppe habitat. Shrub steppe habitats cover over 13 percent of Utah's surface, making them among the most abundant habitats in the state. While shrub steppe areas still remain across the state, they are in poor condition and sagebrush plants in particular are not as healthy as they once were. Mule deer also are closely connected to shrub steppe habitats, especially in winter. The project area is located in a focus area as crucial mule deer and elk winter range. Crucial habitats depend on periodic fires to stay healthy. Fire control efforts and invasive species have disrupted this natural cycle in the project area, leaving an even age stand of decadent sagebrush with little to no understory of grasses and forbs.

The proposal complies with the following WAP Conservation Strategies:

- 1. Permanently protect certain key shrubsteppe habitats and restore degraded habitats wherever possible.
- 3. Reintroduce natural fire patterns through prescribed burns and by reducing populations of invasive species. (this would be accomplished thru treatments)
- 4. Research and monitor shrubsteppe habitats. (Nested frequency monitoring pre and post would occur)
- 5. Establish partnerships with state and federal agencies and private landowners to address threats to shrubsteppe (This project would be jointly planned by UDWR and BLM)
- 6. Enforce OHV regulations; educate OHV users about the need to appropriately operate their OHVs. (the New Kanab RMP precluded cross country OHV travel in the project area).

Project Relevance to other planning documents: This project is in conformance with the Kanab Field Office Record of Decision and Resource Management Plan (RMP), Signed October, 31 2008. VEG-30, 32, 33, 35. SOL-3.

The proposed treatment is consistent with Fish and Wildlife Habitat Management Decision #FW-01, which states: 1) that BLM will manage suitable public land habitats for the recovery or reestablishment of native populations through collaborative planning with local, state, and federal agencies, user groups, and interested publics; and 2) that BLM will also seek to limit additional adverse impacts to crucial habitats on public lands from urbanization and encroachment to preserve the integrity of wildlife corridors and migration routes and access to key forage areas.

The proposed project is consistent with the Southern Utah Support Area Fire Management Plan dated September 9, 2004, which states: 2000 acres be mechanically treated to convert pinyon and juniper invasion (condition class 3) into sagebrush/perennial grass (condition class 1 or 2) vegetation type.

Potential Risks: If the seeding doesn't take there may be a window of opportunity for invasive species to become established in the site.

Proposed Methods: Bullhog 1000 acres within identified 1755 acres. This project would be accomplished through mechanically

chipping/shredding/mulching pinyon and juniper trees. Islands and corridors of pinyon and juniper would remain untreated throughout the unit, creating a mosaic pattern of treated and untreated vegetation. Treated areas would be broadcast seeded before mechanical implementation with a mix of native and non-native shrubs, grasses and forbs appropriate for the site. UDWR would provide seed and seeding contract. BLM would provide bullhog contract.

Shapefile Name: S:/DWR/HPD-2010/GIS Shape Files/1421.shp Seed Source: GBRC

**UPCD Reg Team Coord Date:** 

# **Project Proposal**

Project Proposal									
Proposed NEPA Action:									
Proposed Arch Action:									
✓ Vegetation N	Monitoring	Wildlife Monitoring							
Monitoring Information:	Existing: A Nested Frequency plot is located within the project area.  Sedimentation, Salinity, and Erosion monitoring established by NRCS- 1995  Future: Frequency studies will be read yearly for 3 years. Data will be summarized and placed in project files. Frequency will then be read once every 3-5 years by Kanab Field Office. Success will be determined by the site having 40% or greater frequency of seeded perennial species by fall of 2012.								
Grazing Management:	Areas seeded within the Zion and Burnt Flat Allotment would be rested from grazing for a minimum of two complete growing seasons in order to allow the seedlings to become established and set seed.								
SPECIES BENE	FITING								
Mule Deer		Elk							
LAND OWNERS	SHIP								
Owner		Acres							
BLM		1000							
	Total	1000							
-									

#### PROPOSED FUNDING

Source		Amount Requested	Date Approved	Amount Approved
Unfunded Balance		\$40,000.00		\$0.00
BLM		\$368,000.00		\$368,000.00
BLM ARRA		\$40,000.00	3/12/2009	\$40,000.00
	Totals	\$448,000.00		\$408,000.00

### PROPOSED BUDGET

Item	Description	DWR Account	Partner Contrib.
Seed (GBRC)	Seed for 1000 acres @ \$65/acre	\$65,000.00	\$0.00
Contractual Services	Aerial Seeding contract for 1000 acres @ \$15/ac	re \$15,000.00	\$0.00
Other	Clearances	\$0.00	\$3,000.00
Contractual Services	Bullhog Contract	\$0.00	\$365,000.00
	Totals	\$80,000.00	\$368,000.00

## **Project Map:**

